

# Become a skilled Data Analyst with Excel, Power BI & SQL

**Starts July 6, 2024**

- ✓ Spreadsheet Operations
- ✓ Excel Formulas
- ✓ Excel Charts
- ✓ Pivot Tables
- ✓ Data Cleaning
- ✓ Data Modeling
- ✓ Data Visualization
- ✓ Data Analysis
- ✓ Database Querying

*Prepared by Foresight BI & Analytics*

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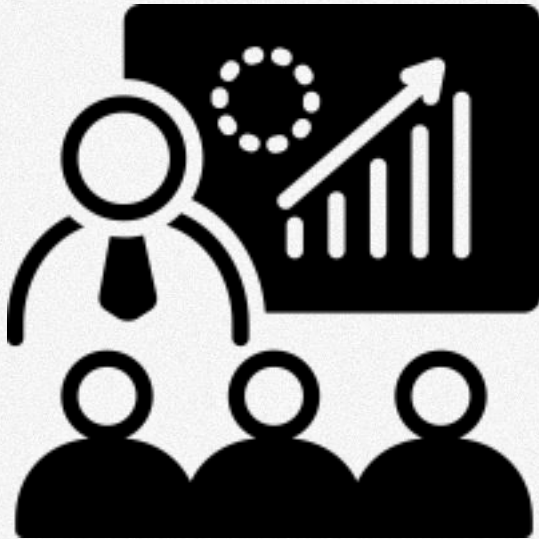
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# Overview



*Unlock the Power of Data.*

Microsoft Power BI has become the leading Business Intelligence and Analytics tool in the market.

Several organizations have implemented Power BI and many more are beginning to implement Power BI as part of their IT infrastructure, to deliver Dashboards and Reporting Automation for operational & strategic decision making.

In a world that has become data driven, there is a continuous high demand for Secure, Fast, Reliable, Scalable, Efficient and Affordable Analytical tools to drive businesses forward using Data.

Many tools check these boxes, Microsoft Power BI Leads all others

Besides Power BI, most organizations have their transactional data stored in databases that require Structured Query Language (SQL) for data retrieval and other tasks.

Microsoft Excel is the most used application globally. Everyday, 750million people use Excel to carry out various operations including as ad-hoc data storages

*If you understand the need for time saving, cost reduction, profit maximization and most importantly, intelligent decision making, our Power BI + SQL Bootcamp is the program you need to enrol for.*

The Power BI + SQL Bootcamp is a 10- weekend, Online Live program that teaches participants how to Operate in a Analyze and Visualize data with Power BI and how to use SQL to query and retrieve data from databases.

In addition, participants will have access to our Self-paced Excel Class, which will be an excellent foundation before the live Power BI and SQL Classes begin.

The curriculum covers every essential concept from absolute beginners to advanced levels.

*This brochure contains details of our Excel + Power BI + SQL Bootcamp Program for your consideration.*

# Why you should attend



8 hours of online live classes every weekend from 1pm – 4pm West African Time (Saturdays and Sundays)

Led by our Microsoft Certified Trainer and MVP (Data Platform) In the class, you get the opportunity to meet other participants, ask questions and learn from other questions from your peers.

At the end of every class, you get the recording of the session.

This will be available to you for life so you can reference the content any time.

Many of our participants from previous cohorts have testified how useful the recordings have been for them in the course of their jobs.

Practice makes perfect. Every weekend, participants will get practical assignments to get their hands strong on the concepts.

Not only will participants know their standings with the assignments, they also help us gauge the level of your understanding so we can help you fix any gaps in between.

We have created a WhatsApp Group to keep the communication going after the classes.

In this group, you will be able to ask questions and get feedbacks from peers and from the Instructor when necessary.

# Excel Course Outline (Self Paced - 2 Weeks)

## **INTRODUCTION TO MICROSOFT EXCEL**

- Navigation, Ribbon, and Workbook Structure
- Working with Worksheets: Inserting, Deleting, and Renaming Sheets
- Cell Formatting: Font, Alignment, Borders, and Number Formats

## **DATA ENTRY AND EDITING**

- Inputting and Modifying Data
- Basic Formulas and Functions: SUM, AVERAGE, MIN, MAX, COUNT
- AutoFill: Copying Formulas and Filling Data Series
- Introduction to Formatting: Conditional Formatting and Cell Styles
- Managing Workbooks: Saving, Closing, and Opening Files
- Worksheet Navigation and Selection Techniques

## **WORKING WITH EXCEL DATA**

- Data Validation: Setting Rules and Restrictions
- Advanced Paste Special: Transposing, Linking
- Working with Ranges: Sorting and Filtering Data
- Using Named Ranges

## **USING ESSENTIAL EXCEL FUNCTIONS**

- Aggregate Functions: SUM, AVERAGE, MIN, MAX, COUNT, COUNTA
- Using Text Functions: LEFT, RIGHT, MID, CONCATENATE, CONCAT, TEXTJOIN
- Data Analysis functions: SUMIF, COUNTIF, AVERAGEIF
- Lookup Functions: VLOOKUP, XLOOKUP
- Date Functions: EOMONTH, DATE, DATEDIFF

## **DATA ANALYSIS & VISUALIZATION**

- Understanding Structured Data
- Creating Excel Pivot Tables
- Changing Pivot Table Data Ranges
- Using Slicers

# PowerBI Course Outline (Live - 7 Weeks)

## INTRODUCTION TO DATA & POWER BI



- Data as most strategic business asset
- Data Storytelling & Categories of Data Analytics
- Roles in Data
- Tasks of Data Analysts
- Introduction to Power BI
- Power BI Ecosystem

- Use basic statistical functions
- Create semi-additive measures
- Use quick measures
- Remove unnecessary rows and columns
- Identify poorly performing measures, relationships, and visuals
- Reduce cardinality levels to improve performance

## DATAMODELING & DAX FORMULALANGUAGE



- Define the tables
- Configure table and column properties
- Design and implement role-playing dimensions
- Define a relationship's cardinality and cross-filter direction
- Design a data model that uses a star schema
- Create a common date table
- Writing Variance Formulas
- Visualizing your reports
- Create calculated tables
- Create hierarchies
- Create calculated columns
- Implement row-level security roles
- Use the Q&A feature
- Create basic measures by using DAX
- Use CALCULATE to manipulate filters
- Implement Time Intelligence using DAX
- Replace implicit measures with explicit measures

## DATA CLEANING & DATA PREP



- Identify and connect to a data source
- Change data source settings
- Select a shared dataset or create a local dataset
- Select a storage mode
- Use Microsoft Dataverse
- Change the value in a parameter
- Connect to a data flow
- Profile the data
- Resolve inconsistencies, unexpected or null values, and data quality issues
- Identify and create appropriate keys for joins
- Evaluate and transform column data types
- Shape and transform tables
- Combine queries
- Apply user-friendly naming conventions to columns and queries
- Configure data loading
- Resolve data import errors

## DATA VISUALIZATION & DATA ANALYSIS



- Add visualization items to reports
- Choose an appropriate visualization type
- Format and configure visualizations
- Use a custom visual
- Apply and customize a theme
- Configure conditional formatting
- Apply slicing and filtering
- Configure the report page
- Use the Analyze in Excel feature
- Choose when to use a paginated report
- Manage tiles on a dashboard
- Configure mobile view
- Use the Q&A feature
- Add a Quick Insights result to a dashboard
- Apply a dashboard theme
- Pin a live report page to a dashboard
- Configure bookmarks
- Create custom tooltips
- Edit and configure interactions between visuals
- Configure navigation for a report
- Apply sorting
- Configure Sync Slicers
- Group and layer visuals by using the selection pane
- Drilldown into data using interactive visuals
- Export report data

- Export report data
- Design reports for mobile devices
- Use the Analyze feature in Power BI
- Identify outliers
- Choose between continuous and categorical axes
- Use groupings, binnings, and clustering
- Use AI visuals
- Use the Forecast feature
- Create reference lines by using the Analytics pane

## DEPLOY & MAINTAIN POWER BI SOLUTIONS



- Identify when a gateway is required
- Configure a dataset scheduled refresh
- Configure row-level security group membership
- Provide access to datasets
- Manage global options for files
- Create and configure a workspace
- Assign workspace roles
- Configure and update a workspace app
- Publish, import, or update assets in a workspace
- Apply sensitivity labels to workspace content
- Configure subscriptions and data alerts
- Promote or certify Power BI content

# SQL Course Outline (Live - 3 Weeks)

## **GETTING STARTED WITH TRANSACTIONAL SQL**

- Introduction to Transactional SQL
- Understanding basic concept of RDBMS
- Using a query to write and execute queries
- Write SELECT statement for data retrieval
- Understanding basic SQL Data Types and Usages
- Understanding SQL Nulls

## **SQL BUILT-IN FUNCTIONS**

- Writing queries with Scalar functions
- Using aggregate functions
- Using GROUP BY to combine data into groups based on common column value
- Filtering groups with HAVING

## **SORTING AND FILTERING QUERY RESULTS**

- Sorting Query Results with ORDER BY
- Using TOP clause to limit returned rows
- Using WHERE clause to filter returned rows
- Using DISTINCT to eliminate duplicate rows from results

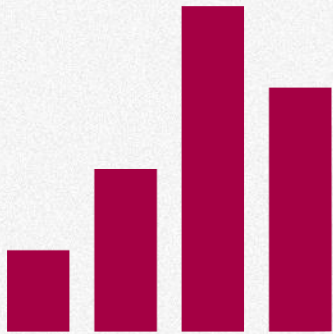
## **MODIFYING DATA**

- Inserting data into an existing table
- Using the IDENTITY and SEQUENCE to auto populate column values
- Modifying data with UPDATE statement
- Deleting data with DELETE statement
- Appending data with UNION

## **USING JOINS AND SUBQUERIES**

- Querying multiple tables with JOINS operations
- Understanding INNER JOIN, OUTER JOINS and CROSS JOIN
- Writing Subqueries with SELECT statement

# About Us



# FORESIGHT BI

Foresight BI & Analytics is a Business Intelligence & Data Analytics firm focused on delivering world-class Training & Consulting Solutions. Our objective is to help organizations "achieve more with less"

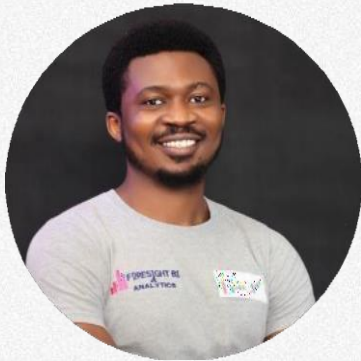
Foresight BI consulting can help unlock the immense potential within the "most experienced staff in any organization" – DATA, to drive strategy and decision making. We employ Microsoft's BI and Data Analytics technologies in our delivery.

Our Training courses equip participants with time saving skills and techniques to go "from data to actionable insights" towards achieving the organization's objectives.

*We are experts in Microsoft BI and related Data Analytics Technologies.*



# Lead Trainer's Profile



**Ahmed Oyelowo**

Ahmed is a Microsoft Certified Power BI Data Analyst, Microsoft Certified Azure Enterprise Data Analyst, Microsoft Certified Trainer (MCT) and also a Microsoft MVP for the Data Platform.

He has developed cutting edge solutions and trained various corporate clients and Individuals on Business Intelligence, Excel and Financial Modeling. He has been consulting & training on Power BI since it's early days in 2015


Ahmed has trained courses on:

- Power BI
- Power Query,
- Financial Modelling
- Microsoft Excel
- Advanced Data Analysis & Reconciliation and
- Data Presentation.

He is the Managing Partner & Lead Trainer at Foresight BI & Analytics.

# Contact Us

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